



STIC Search Report

EIC 2600

STIC Database Tracking Number: 206012

TO: Jeffrey Smith
Location: TL Lab3 (3019)
Art Unit : 2624
Monday, October 30, 2006

Case Serial Number: 10/677966

From: Virgil O. Tyler(ASRC)
Location: EIC 2600
KNX-8B68
Phone: 571-272-8536

Virgil.Tyler@uspto.gov

Search Notes

Dear Examiner Smith,

Attached are the search results (from commercial databases) for your case.

Tags mark the patent/articles, which might be of interest. After you review all records including tagged and untagged records, if you wish to order the complete text of any record, please submit request(s) directly to the STIC-EIC 2600 Email Box or hand carry the request to the front desk of the respective EIC.

Please call if you have any questions or suggestions. I have enclosed a Search Results Feedback Form to facilitate further comments or suggestions. Please take a few minutes to share with us your feedback.

Thanks

Virgil O. Tyler

Virgil O. Tyler, CLIN Assistant
Technical Information Specialist
ASRC Aerospace Corporation
EIC 2600



EIC2600

Fast & Focused Search Feedback Form (Optional)



The search results generated for your *Fast & Focused* search request are attached.
If you have any questions or comments about the scope or the results of the search, please contact *the EIC Searcher* who conducted the search or contact:

Pamela.Reynolds@uspto.gov, EIC2600 Team Leader, 2-3505

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:

Example: 2611

➤ Were you satisfied with the coverage and search strategies of this search?

☐

YES

☐

NO

Why/Why Not?

➤ Relevant prior art found; Search results used as follows:

☐
☐

102 rejection

103 rejection

☐
☐

Cited as being of interest.

Helped examiner better understand the invention.

☐

Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

☐
☐

Foreign Patent(s)

Non-Patent Literature (journal articles, conference proceedings, etc.)

➤ Relevant prior art not found:

☐
☐

Results verified the lack of relevant prior art (helped determine patentability).

Search results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-EIC2600, KNX 8B59. Thanks.

File 2:INSPEC 1898-2006/Oct W4
(c) 2006 Institution of Electrical Engineers

File 5:Biosis Previews(R) 1969-2006/Oct W4
(c) 2006 The Thomson Corporation

File 6:NTIS 1964-2006/Oct W3
(c) 2006 NTIS, Intl Cpyrght All Rights Res

File 8:Ei Compendex(R) 1970-2006/Oct W3
(c) 2006 Elsevier Eng. Info. Inc.

File 34:SciSearch(R) Cited Ref Sci 1990-2006/Oct W4
(c) 2006 The Thomson Corp

File 35:Dissertation Abs Online 1861-2006/Oct
(c) 2006 ProQuest Info&Learning

File 65:Inside Conferences 1993-2006/Oct 30
(c) 2006 BLDSC all rts. reserv.

File 71:ELSEVIER BIOBASE 1994-2006/Oct W4
(c) 2006 Elsevier B.V.

File 73:EMBASE 1974-2006/Oct 27
(c) 2006 Elsevier B.V.

File 94:JICST-EPlus 1985-2006/Jul W3
(c) 2006 Japan Science and Tech Corp(JST)

File 95:TEME-Technology & Management 1989-2006/Oct W5
(c) 2006 FIZ TECHNIK

File 98:General Sci Abs 1984-2006/Oct
(c) 2006 The HW Wilson Co.

File 99:Wilson Appl. Sci & Tech Abs 1983-2006/Sep
(c) 2006 The HW Wilson Co.

File 136:BioEngineering Abstracts 1966-2006/Sep
(c) 2006 CSA.

File 143:Biol. & Agric. Index 1983-2006/Sep
(c) 2006 The HW Wilson Co

File 144:Pascal 1973-2006/Oct W2
(c) 2006 INIST/CNRS

File 155:MEDLINE(R) 1950-2006/Oct 27
(c) format only 2006 Dialog

File 172:EMBASE Alert 2006/Oct 27
(c) 2006 Elsevier B.V.

File 188:Health Devices Sourcebook 2004
ECRI (A nonprofit agency)

File 198:Health Devices Alerts(R) 1977-2006/Aug W2
(c) 2006 ECRI-nonprft agncy

File 239:Mathsci 1940-2006/Dec
(c) 2006 American Mathematical Society

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 2006 The Thomson Corp

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 The Gale Group

File 603:Newspaper Abstracts 1984-1988
(c) 2001 ProQuest Info&Learning

File 483:Newspaper Abs Daily 1986-2006/Oct 29
(c) 2006 ProQuest Info&Learning

File 248:PIRA 1975-2006/Oct W2
(c) 2006 Pira International

Set	Items	Description
S1	2786599	X() (RAY?? OR RADIATION OR RADIOGRAPHY)
S2	1227624	CT OR COMPUTED() (TOMOGRAPHY OR RADIOGRAPHY)
S3	76653	CONVOLUTION (January 1995)
S4	9300715	IMAG? OR FLUOROSCOPIC()IMAG? OR PIXEL? OR PEL OR POINT??
S5	52	AU=(ALLOUCHE, C? OR ALLOUCHE C?)
S6	1653084	FILTER??? OR FOURIER(3N)TRANSFORM??
S7	2091907	NOISE?? OR INTERFERENCE?? OR GLARE?? OR GLARING OR PHANTOM-

```

      ?? OR REMANENCE??
S8      67023  S1(3N)S2
S9      18     S8(20N)S3
S10     14     RD  (unique items)
S11     13     S10(20N) (S4 OR S6 OR S7)
S12     13     S11 NOT PY>2002
S13     1      S10 NOT S12
S14     0      S13 NOT PY>2002
S15     0      S8 AND S5
S16     0      (S4(3N) (S6 OR S7)) AND S5
S17     614    (S4(3N) (S6 OR S7)) (3N)S3
S18     0      S17(3N)S8
S19     4      S17(S)S8
S20     3      S19 NOT S12
S21     1      RD  (unique items)
S22     0      S3 AND S5

```

11/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

06027286 INSPEC Abstract Number: A9518-8760K-003, B9510-7510B-032, C9510-7330-032

Title: Positron emission tomography: physical models and reconstruction issues

Author(s): Ollinger, J.M.

Author Affiliation: Inst. for Biomed. Comput., Washington Univ., St. Louis, MO, USA

Conference Title: Proceedings ICIP-94 (Cat. No.94CH35708) Part vol.3 p.543-7 vol.3

Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1994 Country of Publication: USA 3 vol. (liii+992+1064+1050) pp.

ISBN: 0 8186 6952 7

U.S. Copyright Clearance Center Code: 0 8186 6950 0/94/\$4.00

Conference Title: Proceedings of 1st International Conference on Image Processing

Conference Sponsor: IEEE Signal Process. Soc

Conference Date: 13-16 Nov. 1994 Conference Location: Austin, TX, USA

Language: English

Subfile: A B C

Copyright 1995, IEE

...Abstract: pharmaceutical. These images can be combined with appropriate physiological models and ancillary measurements to yield **images** of physiological parameters such as perfusion, metabolic rates, receptor characteristics etc. Although **images** are usually reconstructed with the **convolution** -backprojection algorithm used in **X - ray CT**, there are several important differences in the data. Effects such as attenuation, Compton scatter, accidental...

11/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

04433461 INSPEC Abstract Number: A89096807, B89058542, C89050727

Title: Information processing for X-ray CT and MRI

Author(s): Yokoyama, T.

Author Affiliation: Syst. Dev. Lab., Hitachi Ltd., Japan

Journal: Information Processing Society of Japan vol.30, no.3 p. 215-24

Publication Date: 1989 Country of Publication: Japan

CODEN: JOSHA4 ISSN: 0447-8053

Language: Japanese

Subfile: A B C

Abstract: Discusses various aspects of **X - ray computed tomography** and magnetic resonance **imaging**, including: NMR computed tomography; half-scan **imaging**; angio- **imaging**; **filtered** back-projection; **convolution**; sampling; FLASH (fast low-angle shot) **imaging**; FISP (fast **imaging** with steady precession); spiral-scan echo planar **imaging**; flow **imaging**; chemical shift imaging; angiography; and segmentation.

11/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

04107516 INSPEC Abstract Number: A88050029, B88029973, C88025601

Title: Biomedical image enhancement by means of a fast polynomial transform

Author(s): Ni Jie; Jin Ji-chen

Author Affiliation: Dept. of Radio Eng., Chongqing Univ., Sichuan, China

Journal: Proceedings of the SPIE - The International Society for Optical Engineering vol.767, pt.1 p.411-15

Publication Date: 1987 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

Conference Title: Medical Imaging

Conference Sponsor: SPIE

Conference Date: 1-6 Feb. 1987 Conference Location: Newport Beach, CA, USA

Language: English

Subfile: A B C

...Abstract: pictures can be obtained by using Fast Polynomial Transform (FPT) implementation of 2-D circular **convolution**. A hidden modulo arithmetic of FPT with operating length 64 and a new design of simple 2-D Frequency Sampling **Filter** are presented. The **filtering convolution** processing of **X-ray** and **CT** pictures is very helpful in efficiently diagnosing lung cancer and liver tubercular.

11/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

02190525 INSPEC Abstract Number: A78042288

Title: Optical inverse radon transform

Author(s): Nishimura, M.; Casasent, D.; Caimi, F.

Author Affiliation: Dept. of Electrical Engng., Carnegie-Mellon Univ., Pittsburgh, PA, USA

Journal: Optics Communications vol.24, no.3 p.276-80

Publication Date: March 1978 Country of Publication: Netherlands

CODEN: OPCOB8 ISSN: 0030-4018

Language: English

Subfile: A

...Abstract: processor that implements the inverse radon transform is described. This operation is of use in **X-ray computed tomography**, transaxial scanning and other **image** construction systems. The optical system outlined uses the **convolution** of two two-dimensional functions to achieve the inverse radon transform by a new implementation...

11/3,K/5 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2006 The Thomson Corporation. All rts. reserv.

0007285137 BIOSIS NO.: 199090069616

AN IMPROVEMENT ON THE TWO-DIMENSIONAL CONVOLUTION METHOD OF IMAGE RECONSTRUCTION AND ITS APPLICATION TO SPECT

AUTHOR: SUZUKI S (Reprint); ARAI H

AUTHOR ADDRESS: DEP RADIOL TECH, COLL MED TECHNOL, HOKKAIDO UNIV, KITA-KU, SAPPORO 060, JPN**JAPAN

JOURNAL: Radioisotopes 39 (4): p155-162 1990

ISSN: 0033-8303

DOCUMENT TYPE: Article

RECORD TYPE: Abstract
LANGUAGE: JAPANESE

...ABSTRACT: SPECT) and X-ray CT one-dimensional (1-D) convolution method is used for their **image** reconstruction from projections. The methods makes a 1-D **convolution filtering** on projection data with a 1-D **filter** in the space domain, and backprojects the **filtered** data for reconstruction. **Images** can also be reconstructed by first forming the 2-D backprojection images from projections and...

11/3,K/6 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
(c) 2006 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

1769769 NTIS Accession Number: DE93015159
Development and application of local 3-D x-ray CT reconstruction software for imaging critical regions in large ceramic turbine rotors
Sivers, E. A. ; Holloway, D. L. ; Ellingson, W. A. ; Ling, J.
Argonne National Lab., IL.
Corp. Source Codes: 001960000; 0448000
Sponsor: Department of Energy, Washington, DC.
Report No.: ANL/MCT/CP-76064; CONF-920799-8
1992. 9p
Languages: English Document Type: Conference proceeding
Journal Announcement: GRAI9403; ERA9401
Review of progress in quantitative nondestructive evaluation (NDE), La Jolla, CA (United States), 19-24 Jul 1992. Sponsored by Department of Energy, Washington, DC.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A02/MF A01

... produces an "edge-enhanced" reconstruction and requires only minor modifications of the standard 3-D **X - ray CT** algorithm, is recommended. Since the primary difference between Global and Local CT concerns the design of the **convolution filter**, two versions of a Local CT fitter are discussed here. These two **filters** are used in a Local CT implementation to reconstruct 3D **X - ray CT** data. For comparison, Global CT using the Shepp-Logan variation of the fan-beam convolution...

11/3,K/7 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03467521 E.I. Monthly No: EI9208097888
Title: Statistical approach to X-ray CT imaging and its applications in image analysis--I: Statistical analysis of X-ray CT imaging.
Author: Lei, Tianhu; Sewchand, Wilfred
Source: IEEE Transactions on Medical Imaging v 11 n 1 Mar 1992 p 53-61
Publication Year: 1992
CODEN: ITMID4 ISSN: 0278-0062
Language: English

Identifiers: **X - RAY CT IMAGING ; PIXELS ; RADON INVERSE FORMULA; CONVOLUTION ALGORITHM**

11/3,K/8 (Item 2 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03048563 E.I. Monthly No: EI9104043143

Title: Linogram reconstruction for magnetic resonance imaging (MRI).
Author: Axel, Leon; Herman, Gabor T.; Roberts, David A.; Dougherty, Lawrence
Corporate Source: Dept of Radiol, Hospital of the Univ of Pennsylvania, Philadelphia, PA, USA
Source: IEEE Transactions on Medical Imaging v 9 n 4 Dec 1990 p 447-449
Publication Year: 1990
CODEN: ITMID4 ISSN: 0278-0062
Language: English

Abstract: Reconstruction of magnetic resonance **images** (MRIs) by backprojection, which commonly uses techniques analogous to those employed for **X - ray computed tomography**, is discussed. The recently developed method of linogram reconstruction, an alternative to conventional convolution/backprojection...

11/3,K/9 (Item 3 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03022339 E.I. Monthly No: EIM9102-004996

Title: Effect of convolution kernels on 3-D X - Ray CT image quality for characterization of ceramics.
Author: Gopalan, K.; Hentea, T. I.; Ellingson, W. A.
Corporate Source: Purdue Univ, Hammond, IN, USA
Conference Title: Fourteenth Annual Conference on Composites and Advanced Ceramic Materials
Conference Location: Cocoa Beach, FL, USA Conference Date: 19900114
E.I. Conference No.: 13787
Source: Ceramic Engineering and Science Proceedings v 11 n 9-10 pt 2. Publ by American Ceramic Soc, Westerville, OH, USA. p 1320-1328
Publication Year: 1990
CODEN: CESPDK ISSN: 0196-6219
Language: English

Title: Effect of convolution kernels on 3-D X - Ray CT image quality for characterization of ceramics.

Abstract: X-ray computed tomographic **imaging** is gaining widespread application for nondestructive evaluation and characterization of advanced structural ceramic materials. Since quality of the **X - ray CT image** depends on the **convolution** kernel used, it is important to choose an appropriate kernel for accurate measurement of parameters...

11/3,K/10 (Item 4 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

01675874 E.I. Monthly No: EIM8408-063798

Title: DIRECT METHOD OF IMAGE RECONSTRUCTION FROM ITS LINE INTEGRALS BY CONE BEAM X-RAYS.

Author: Imiya, Jun; Ogawa, Hidemitsu
Corporate Source: Tokyo Inst of Technology, Dep of Computer Science,

Tokyo, Jpn

Conference Title: Proceedings of the 1984 International Joint Alpine Symposium: Medical Computer Graphics and Image Communications and Clinical Advances in Neuro CT/NMR.

Conference Location: Innsbruck, Austria Conference Date: 19840211

E.I. Conference No.: 04386

Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 84CH2006-5), Piscataway, NJ, USA p 95-101

Publication Year: 1984

ISBN: 0-8186-0524-3

Language: English

Identifiers: **IMAGE RECONSTRUCTION IN COMPUTED TOMOGRAPHY ; X - RAY TRANSFORMATION MATHEMATICS; CONVOLUTION ; LINE INTEGRAL TRANSFORMATION; FILTERED BACKPROJECTION METHOD; CONE BEAM X-RAY TRANSFORM; INVERSION FORMULA FOR IMAGE RECONSTRUCTION**

11/3,K/11 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2006 Elsevier B.V. All rts. reserv.

05341415 EMBASE No: 1993109500

Study of the characteristics and performances of a radiotherpay simulator-based computed tomography system (CT)

ETUDE DES CARACTERISTIQUES ET PERFORMANCES D'UN SIMULATEUR-SCANNEUR

Diallo I.; Bouhnik H.; Aubert B.; Chavaudra J.

Service de Physique, Institut Gustave-Roussy, Rue

Camille-Desmoulins, 94805 Villejuif Cedex France

Bulletin du Cancer/Radiotherapie (BULL. CANCER RADIOTHER.) (France)

1993, 80/1 (27-37)

CODEN: BCRAE ISSN: 0924-4212

DOCUMENT TYPE: Journal; Article

LANGUAGE: FRENCH SUMMARY LANGUAGE: ENGLISH; FRENCH

...unreliability of our simulator gantry, and the low photon rate allowed in screening mode, the **noise** is, according to the **convolution filter** used, in the range of 8-25 times higher than that obtained on the conventional **X - ray CT** scanner. This **noise**, and some characteristics of the detection system (in particular contrast factor and maximum dynamic range...

11/3,K/12 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

04599113 JICST ACCESSION NUMBER: 00A0581387 FILE SEGMENT: JICST-E
Observation and analysis of internal structure of rock using X-ray CT.

NAKANO TSUKASA (1); NAKASHIMA YOSHITO (1); NAKAMURA KOICHI (1); IKEDA SUSUMU (2)

(1) Geol. Surv. of Japan, Agency of Ind. Sci. and Technol.; (2) Univ. of Tokyo

Chishitsugaku Zasshi (Journal of the Geological Society of Japan), 2000, VOL.106, NO.5, PAGE.363-378, FIG.11, REF.35

JOURNAL NUMBER: F0528AAM ISSN NO: 0016-7630 CODEN: CHTZA

UNIVERSAL DECIMAL CLASSIFICATION: 552

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

...ABSTRACT: of a material greatly affects the LAC for the photon energy level of the medical X - ray CT scanners. **Filtered** back-projection (FBP) method and **convolution** back-projection (CBP) method are applied to the reconstruction of a CT **image** from the obtained X-ray projection data. A suitable choice of a reconstruction filter in...

11/3,K/13 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2006 Dialog. All rts. reserv.

08464290 PMID: 2345789

[An improvement on the two-dimensional convolution method of image reconstruction and its application to SPECT]

Suzuki S; Arai H

Department of Radiological Techniques, College of Medical Technology, Hokkaido University, Sapporo, Japan.

Radioisotopes (JAPAN) Apr 1990, 39 (4) p155-62, ISSN 0033-8303--
Print Journal Code: 20010290R

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: JAPANESE

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... SPECT) and X-ray CT one-dimensional (1-D) convolution method is used for their **image** reconstruction from projections. The method makes a 1-D **convolution filtering** on projection data with a 1-D **filter** in the space domain, and back projects the **filtered** data for reconstruction. Images can also be reconstructed by first forming the 2-D backprojection..

21/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2006 Institution of Electrical Engineers. All rts. reserv.

05165598 INSPEC Abstract Number: A9214-8760J-013

Title: CT fan beam reconstruction with a nonstationary axis of rotation

Author(s): Concepcion, J.A.; Carpinelli, J.D.; Kuo-Petravic, G.; Reisman, S.

Author Affiliation: Siemens Med. Syst., Princeton, NJ, USA

Journal: IEEE Transactions on Medical Imaging vol.11, no.1 p.111-16

Publication Date: March 1992 Country of Publication: USA

CODEN: ITMID4 ISSN: 0278-0062

U.S. Copyright Clearance Center Code: 0278-0062/92/\$03.00

Language: English

Subfile: A

...Abstract: a nonstationary axis of rotation would backproject pixel values to incorrect coordinate points. A convolution **filtered** backprojection algorithm has been derived for correcting images that were acquired with a nonstationary axis...

File 344:Chinese Patents Abs Jan 1985-2006/Jan
(c) 2006 European Patent Office
File 347:JAPIO Dec 1976-2006/Jan(Updated 061009)
(c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200669
(c) 2006 The Thomson Corporation
File 371:French Patents 1961-2002/BOPI 200209
(c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	148119	X() (RAY?? OR RADIATION OR RADIOGRAPHY)
S2	22248	CT OR COMPUTED() (TOMOGRAPHY OR RADIOGRAPHY)
S3	5795	CONVOLUTION
S4	2822675	IMAG? OR FLUOROSCOPIC() IMAG? OR PIXEL? OR .PEL OR POINT??
S5	14	AU=(ALLOUCHE, C? OR ALLOUCHE C?)
S6	842735	FILTER??? OR FOURIER(3N)TRANSFORM??
S7	574787	NOISE?? OR INTERFERENCE?? OR GLARE?? OR GLARING OR PHANTOM- ?? OR REMANENCE
S8	6393	S1(3N)S2
S9	4	S8(20N)S3
S10	7	S8(40N)S3
S11	3	S10 NOT S9
S12	5	S10(20N) (S4 OR S6 OR S7)
S13	2	(S4(3N) (S5 OR S6)) (3N)S8
S14	2	S13 NOT S10
S15	4	(S3 OR S8 OR (S4(3N) (S6 OR S7))) AND S5
S16	4	S15 NOT (S10 OR S14)
S17	5	S5 AND IC=G06K?
S18	4	S17 NOT AD=20021031:20061030/PR
S19	3	S18 NOT (S10 OR S14 OR S16)

9/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

06876786 **Image available**
THREE-DIMENTIONAL IMAGING DISPLAY EQUIPMENT

PUB. NO.: 2001-104293 [JP 2001104293 A]
PUBLISHED: April 17, 2001 (20010417)
INVENTOR(s): SAITO MOTOAKI
APPLICANT(s): TERARIKON INC
APPL. NO.: 11-315742 [JP 99315742]
FILED: October 01, 1999 (19991001)

ABSTRACT

... ray CT equipment that prepares and displays three-dimensional images using projection data collected by **x - ray CT** equipment without using two-dimensional imaging data reconstructed by **x - ray CT** equipment.

SOLUTION: **Convolution** data are prepared by **convolution** treatment of projection data using the projection data recorded in portable recording media by **x - ray CT** equipment and information obtained at data collection. Imaging three-dimensional voxel is prepared by back...

9/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

03891636 **Image available**
CONVOLUTION METHOD IN **X - RAY CT** DEVICE

PUB. NO.: 04-256736 [JP 4256736 A]
PUBLISHED: September 11, 1992 (19920911)
INVENTOR(s): ISHII SO
APPLICANT(s): HITACHI MEDICAL CORP [420143] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-017498 [JP 9117498]
FILED: February 08, 1991 (19910208)
JOURNAL: Section: C, Section No. 1020, Vol. 17, No. 42, Pg. 33, January 26, 1993 (19930126)

CONVOLUTION METHOD IN **X - RAY CT** DEVICE

ABSTRACT

... without increasing an arithmetic time, while using a hardware of the same configuration, in the **convolution** method in an **X - ray CT** device which uses an FFT for a method for performing a filtration for executing out...

9/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

01054674 **Image available**
CONVOLUTION OPERATOR

PUB. NO.: 57-204974 [JP 57204974 A]
PUBLISHED: December 15, 1982 (19821215)

INVENTOR(s): TAKAHASHI SHUNJI
 APPLICANT(s): HITACHI MEDICAL CORP [420143] (A Japanese Company or Corporation), JP (Japan)
 APPL. NO.: 56-090512 [JP 8190512]
 FILED: June 12, 1981 (19810612)
 JOURNAL: Section: P, Section No. 182, Vol. 07, No. 60, Pg. 23, March 12, 1983 (19830312)

ABSTRACT

...CONSTITUTION: In a **convolution** operator which operates the product sum between measurement data and correction data for image reconstitution in a CT device using transmission **X rays**, ultrasonic waves, or the like, the number of bits of correction data for image reconstitution...

9/3,K/4 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014528101 - Drawing available

WPI ACC NO: 2004-710052/200469

Related WPI Acc No: 2003-222237; 2003-843515; 2004-487636; 2004-532899;

2004-831780; 2005-521068; 2005-810822; 2006-163209

XRPX Acc No: N2004-563062

Image reconstruction method for X - ray computed tomography , involves reconstructing exact image of object scanned in spiral fashion with variable pitch, using convolution -based filtered back projection algorithm

Patent Assignee: UNIV CENT FLORIDA (UYFL-N); UNIV CENT FLORIDA RES FOUND INC (UYFL-N)

Inventor: KATSEVICH A

Patent Family (5 patents, 105 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
WO 2004084137	A2	20040930	WO 2003US41114	A	20031224	200469 B
AU 2003304013	A1	20041011	AU 2003304013	A	20031224	200504 E
EP 1605825	A2	20051221	EP 2003816404	A	20031224	200601 E
			WO 2003US41114	A	20031224	
JP 2006513812	W	20060427	WO 2003US41114	A	20031224	200628 E
			JP 2005513580	A	20031224	
AU 2003304013	A8	20051103	AU 2003304013	A	20031224	200629 E

Priority Applications (no., kind, date): US 2003728136 A 20031204; WO 2003US9909 A 20030401; US 2003389534 A 20030314; US 2003389090 A 20030314; WO 2003US38375 A 20031204

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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WO 2004084137	A2	EN	38	12	
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National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States, Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003304013	A1	EN
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Based on OPI patent WO 2004084137

EP 1605825	A2	EN
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PCT Application WO 2003US41114

Based on OPI patent WO 2004084137

Regional Designated States,Original: AL AT BE BG CH CY CZ DE DK EE ES FI
FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
JP 2006513812 W JA 23 PCT Application WO 2003US41114
Based on OPI patent WO 2004084137
AU 2003304013 A8 EN Based on OPI patent WO 2004084137

Image reconstruction method for X - ray computed tomography , involves
reconstructing exact image of object scanned in spiral fashion with
variable pitch, using convolution -based filtered back projection
algorithm

11/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

05572649 **Image available**
IMAGE RECONSTRUCTION PROCESSOR

PUB. NO.: 09-187449 [JP 9187449 A]
PUBLISHED: July 22, 1997 (19970722)
INVENTOR(s): TAGUCHI KATSUYUKI
KOBAYASHI TADAHARU
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 08-001015 [JP 961015]
FILED: January 08, 1996 (19960108)

ABSTRACT

...SOLUTION: A reconstruction processing section 12 of an X - ray CT apparatus is provided with a reconstruction processing control part 21 for calculating data selection, centering...

... the total control of the three-dimensional reconstruction processing. A projection data collected undergoes a convolution processing by a convolution computing part 22, and a convolution data C(sub onv) obtained ...

11/3,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0015269905 - Drawing available
WPI ACC NO: 2005-620004/200564
XRPX Acc No: N2005-508816

Image reconstructing method and x-ray CT device

Patent Assignee: GE MED SYS GLOBAL TECH CO LLC (GENE)

Inventor: DING W; WEI T; YAN X

Patent Family (1 patents, 1 countries)

Patent		Application	
Number	Kind Date	Number	Kind Date Update
CN 1614636	A 20050511	CN 200310120365	A 20031106 200564 B

Priority Applications (no., kind, date): CN 200310120365 A 20031106

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
CN 1614636	A	ZH	1		

...includes convoluting projection data for having convolution projecting data, picking up high pass component from convolution projecting data, picking up edge information and removing edge information from high pass component for...

...obtaining corrected projection data and carrying out backward projection for the corrected projection data. The X ray CT unit for realizing the method is also provided.

11/3,K/3 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0010749700 - Drawing available

WPI ACC NO: 2001-362858/

XRPX Acc No: N2001-264540

Three-dimensional image display device for computer tomography apparatus, has mapping unit mapping three-dimensional voxel value to three-dimensional table for processing voxel three dimension value alone

Patent Assignee: TERALICON INC (TERA-N)

Inventor: SAITO M

Patent Family (1 patents, 1 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
JP 2001104293	A	20010417	JP 1999315742	A	19991001	200138	B

Priority Applications (no., kind, date): JP 1999315742 A 19991001

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
JP 2001104293	A	JA	11	9		

Alerting Abstract DESCRIPTION - A x - ray - CT apparatus has movable type recording medium to record and acquire information at the time of... preprocessing of the projection data of examined object at the time of data collection for convolution of the protection data. Three-dimensional voxel reconfiguration area setting unit (73) designates the reconfiguration

14/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

08412284 **Image available**
IMAGE PROCESSOR

PUB. NO.: 2005-160544 [JP 2005160544 A]
PUBLISHED: June 23, 2005 (20050623)
INVENTOR(s): TOYOSHIMA NAKO
OKUMURA YOSHIKAZU
APPLICANT(s): TOSHIBA CORP
TOSHIBA MEDICAL SYSTEMS CORP
APPL. NO.: 2003-400083 [JP 2003400083]
FILED: November 28, 2003 (20031128)

ABSTRACT

PROBLEM TO BE SOLVED: To improve the quality of an X-ray CT image by filtering the image with characteristics according to scanning conditions and image reconstruction conditions as well as edge intensity...

... edge intensity calculating section 120 calculating an edge intensity in a local area of the X-ray CT image, a filter element calculating section 123 determining filter characteristics related to a smoothing level for every local area, a Gaussian filtering section 122 filtering the X-ray CT image according to the filter characteristics determined for every local area, and a storage section 118 storing the correspondence between...

14/3,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0013716793 - Drawing available
WPI ACC NO: 2003-814488/200377
XRPX Acc No: N2003-651882

CT or X-ray medical image filtering method in which image integral SNRs are calculated and compared with calculated limit SNR values while carrying out iterative filtering and, if necessary, changing the filter dose

Patent Assignee: KALTSCHMIDT R (KALT-I); SIEMENS AG (SIEI)

Inventor: KALTSCHMIDT R

Patent Family (2 patents, 2 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
DE 10214114	A1	20031023	DE 10214114	A	20020328	200377 B
US 20030228065	A1	20031211	US 2003401615	A	20030328	200382 E

Priority Applications (no., kind, date): DE 10214114 A 20020328

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
DE 10214114	A1	DE	12	3	

CT or X-ray medical image filtering method in which image integral SNRs are calculated and compared with calculated limit SNR values while carrying out iterative...

16/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

08244536 **Image available**
METHOD AND DEVICE FOR ENHANCING IMAGE CONTRAST

PUB. NO.: 2004-357296 [JP 2004357296 A]
PUBLISHED: December 16, 2004 (20041216)
INVENTOR(s): ALLOUCHE CYRIL
APPLICANT(s): GE MEDICAL SYSTEMS GLOBAL TECHNOLOGY CO LLC
APPL. NO.: 2004-155515 [JP 2004155515]
FILED: May 26, 2004 (20040526)
PRIORITY: 03 200350179 [FR 200350179], FR (France), May 27, 2003
(20030527)

INVENTOR(s): ALLOUCHE CYRIL

ABSTRACT

...to each dot of the image. Using the detecting map, the effect of a mean filter applied to the image to be processed is weighted locally.

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16/3,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0014685539 - Drawing available
WPI ACC NO: 2005-033127/
XRPX Acc No: N2005-028985

Image contrast enhancing method for fluoroscopic apparatus e.g. scanner, involves producing detection card to reveal movements in spatial zone, between two dates, for balancing filter effect applied to one of two acquired images

Patent Assignee: GE MEDICAL SYSTEMS GLOBAL TECHNOLOGY CO (GENE)

Inventor: ALLOUCHE C

Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
FR 2855638	A1	20041203	FR 200350179	A	20030527	200504 B
DE 102004026355	A1	20041216	DE 102004026355	A	20040526	200504 E
JP 2004357296	A	20041216	JP 2004155515	A	20040526	200504 E

Priority Applications (no., kind, date): FR 200350179 A 20030527

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
FR 2855638	A1	FR	21	3	
JP 2004357296	A	JA	16		

Inventor: ALLOUCHE C

Alerting Abstract ...image related to the image (It). The card is used to balance an effect of filter applied to the image (It)....ADVANTAGE - The detection card producing the processed image is used to balance the effect of filter applied to the image, thus reducing fluoroscopic noise in the image acquired by a fluoroscopic apparatus, and enhancing the contrast of the image...

Original Publication Data by Authority

Inventor name & address:

Allouche, Cyril, Montfort l'Amaury, FR ...

... ALLOUCHE C ...

... ALLOUCHE CYRIL

16/3,K/3 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0014244028 - Drawing available

WPI ACC NO: 2004-430073/

XRPX Acc No: N2004-339974

Space-time filtering method in radiography used in medical diagnosis, involves performing weighting on coefficients of respective convolution cores as function of coefficient calculated based on noise statistic for pixel value

Patent Assignee: ALLOUCHE C (ALLO-I); GE MEDICAL SYSTEMS GLOBAL TECHNOLOGY CO (GENE)

Inventor: ALLOUCHE C

Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040086194	A1	20040506	US 2003677966	A	20031002	200440 B
DE 10350697	A1	20040519	DE 10350697	A	20031030	200440 E
FR 2846830	A1	20040507	FR 200213727	A	20021031	200440 E

Priority Applications (no., kind, date): FR 200213727 A 20021031

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040086194	A1	EN	11	5	

...filtering method in radiography used in medical diagnosis, involves performing weighting on coefficients of respective convolution cores as function of coefficient calculated based on noise statistic for pixel value

Inventor: ALLOUCHE C

Alerting Abstract ...NOVELTY - A coefficient (G) is calculated based on difference between the value of the pixel to be filtered and neighborhood pixels and the noise statistic (104) for value of the pixel to be filtered. The weighting is performed on coefficients of respective convolution cores (105) as function of the calculated coefficient, for each pixel of respective images....space-time convolution filer;scanner;space-time filtering program;computer program product for space-time filtering;article of...

...USE - For performing space-time filtering in radiography used in medical diagnosis, for removing noise in fluoroscopic images.

Original Publication Data by Authority

Inventor name & address:

Allouche, Cyril, Montfort L'Amaury, FR ...

... ALLOUCHE C ...

... Allouche, Cyril

Original Abstracts:

...To reduce the fluoroscopic **noise** in an **image** I acquired at a date t, the pixels of this image are paired with the...

...date t-1. For a pixel with coordinates (x,y) of the image I, a **convolution** is done with a core U equivalent to a low-pass filter whose coefficients have...

...x,y) in the image I. For the pixel paired in the image Iprime, a **convolution** is done with the core U whose coefficients have been modified as a function of...

...Iprime. The result of the two convolutions is associated linearly in order to obtain a **filtered** value for the **pixel** with coordinates (x,y). These operations are repeated for each pixel of the image I.

Claims:

...first image, a weighting is performed on the coefficients U(k,l) of a first **convolution** core with a dimension D, equivalent to a low-pass filter, as a function of...

...first image, and k and l are indices used to explore the coefficients of the **convolution** core, a second **convolution** core with coefficients Up(k,l) being thus obtained;b. for each pixel with coordinates...

...first image, a weighting is performed on the coefficients U(k,l) of the first **convolution** core as a function of the coefficient G which is a function of the difference...

...the intensity of the pixel with coordinates (x,y) of a second image, a third **convolution** core with coefficients Uprime(k,l) being thus obtained; andc. the filtered value of...

16/3,K/4 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0014179104 - Drawing available

WPI ACC NO: 2004-364369/

XRPX Acc No: N2004-291456

Fluoroscopic noise determination method during radiography examination, involves performing iterative process on all sub-groups defined in dynamic range, and regression process on dots, to determine noise function coefficients

Patent Assignee: ALLOUCHE C (ALLO-I); GE MEDICAL SYSTEMS GLOBAL TECHNOLOGY CO (GENE)

Inventor: ALLOUCHE C

Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040081344	A1	20040429	US 2003676200	A	20031001	200434 B
DE 10350319	A1	20040519	DE 10350319	A	20031028	200434 E
FR 2846504	A1	20040430	FR 200213566	A	20021029	200434 E

Priority Applications (no., kind, date): FR 200213566 A 20021029

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040081344	A1	EN	11	3	

Inventor: ALLOUCHE C

Alerting Abstract ...USE - For determining **fluoroscopic** noise in images acquired in time-based sequences during radiography examination...

...ADVANTAGE - Reduces **the** noise in **radiography** images, thus improves the readability of image...

Original Publication Data by Authority

Inventor name & address:

Allouche, Cyril, Montfort L'Amaury, FR ...

... ALLOUCHE C ...

... Allouche, Cyril

19/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0012911483 - Drawing available
WPI ACC NO: 2002-417347/200244
XRPX Acc No: N2002-328454

Image processing method for magnetic resonance imaging apparatus, involves processing next image using tag equations determined for current image

Patent Assignee: ALLOUCHE C (ALLO-I); KONINK PHILIPS ELECTRONICS NV (PHIG); PHILIPS GLOEILAMPENFAB NV (PHIG)

Inventor: ALLOUCHE C

Patent Family (6 patents, 22 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2002037416	A2	20020510	WO 2001EP12405	A	20011024	200244 B
US 20020122577	A1	20020905	US 200122398	A	20011130	200260 E
EP 1334467	A2	20030813	EP 2001992984	A	20011024	200355 E
			WO 2001EP12405	A	20011024	
JP 2004512883	W	20040430	WO 2001EP12405	A	20011024	200430 E
			JP 2002540088	A	20011024	
US 6934407	B2	20050823	US 200122398	A	20011030	200556 E
JP 3751591	B2	20060301	WO 2001EP12405	A	20011024	200617 E
			JP 2002540088	A	20011024	

Priority Applications (no., kind, date): EP 2000403028 A 20001031

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
WO 2002037416	A2	EN	17	4		
National Designated States,Original: JP						
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE						
IT LU MC NL PT SE TR						
EP 1334467	A2	EN				PCT Application WO 2001EP12405
						Based on OPI patent WO 2002037416
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE						
IT LI LU MC NL PT SE TR						
JP 2004512883	W	JA	33			PCT Application WO 2001EP12405
						Based on OPI patent WO 2002037416
JP 3751591	B2	JA	12			PCT Application WO 2001EP12405
						Previously issued patent JP 2004512883
						Based on OPI patent WO 2002037416

Inventor: ALLOUCHE C

Class Codes

...International Classification (Main): G06K-009/00

Original Publication Data by Authority

Inventor name & address:

ALLOUCHE, Cyril ...

... Allouche, Cyril ...

... Allouche, Cyril ...

... ALLOUCHE, Cyril

19/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0012739959 - Drawing available
WPI ACC NO: 2002-592661/200264
XRPX Acc No: N2002-470313

Method for following deformation of linear structure on organ deforming in time, comprises calculation of a mathematical expression for deformation of organ from marker points on two images

Patent Assignee: ALLOUCHE C (ALLO-I); KONINK PHILIPS ELECTRONICS NV (PHIG); PHILIPS GLOEILAMPENFAB NV (PHIG)

Inventor: ALLOUCHE C

Patent Family (4 patents, 28 countries)

Patent				Application			
Number	Kind	Date	Number	Kind	Date	Update	
EP 1227441	A1	20020731	EP 200275217	A	20020118	200264	B
FR 2819919	A1	20020726	FR 2001883	A	20010123	200264	E
US 20020146158	A1	20021010	US 200255389	A	20020123	200269	E
JP 2002282237	A	20021002	JP 200213443	A	20020122	200279	E

Priority Applications (no., kind, date): FR 2001883 A 20010123

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
EP 1227441	A1	FR	26	7		

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
IE IT LI LT LU LV MC MK NL PT RO SE SI TR

JP 2002282237	A	JA	9			
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Inventor: ALLOUCHE C

Class Codes

...International Classification (Main): G06K-009/00

Original Publication Data by Authority

Inventor name & address:

Allouche, Cyril ...

... ALLOUCHE C ...

... ALLOUCHE CYRIL ...

... Allouche, Cyril

19/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0012716335 - Drawing available
WPI ACC NO: 2002-568110/
XRPX Acc No: N2002-449755

Magnetic resonance image processing includes monitoring movement of marking points between images, to determine movement of human organ

Patent Assignee: ALLOUCHE C (ALLO-I); KONINK PHILIPS ELECTRONICS NV (PHIG); PHILIPS GLOEILAMPENFAB NV (PHIG)

Inventor: ALLOUCHE C

Patent Family (3 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 1225545	A1	20020724	EP 200275218	A	20020118	200261 B
JP 2002282236	A	20021002	JP 200213442	A	20020122	200279 E
US 20020176637	A1	20021128	US 200255360	A	20020123	200281 E

Priority Applications (no., kind, date): FR 2001881 A 20010123

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1225545	A1	FR	14	6	
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR					
IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2002282236	A	JA	9		

Inventor: ALLOUCHE C

Class Codes

...International Classification (Main): G06K-009/36

Original Publication Data by Authority

Inventor name & address:

Allouche, Cyril ...

... ALLOUCHE CYRIL ...

... Allouche, Cyril

File 348:EUROPEAN PATENTS 1978-2006/ 200643

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20061026UT=20061019

(c) 2006 WIPO/Thomson

Set	Items	Description
S1	94262	X() (RAY?? OR RADIATION OR RADIOGRAPHY)
S2	81322	CT OR COMPUTED() (TOMOGRAPHY OR RADIOGRAPHY)
S3	12824	CONVOLUTION
S4	1335233	IMAG? OR FLUOROSCOPIC()IMAG? OR PIXEL? OR PEL OR POINT??
S5	6	AU=(ALLOUCHE, C? OR ALLOUCHE C?)
S6	520558	FILTER??? OR FOURIER(3N)TRANSFORM??
S7	336973	NOISE?? OR INTERFERENCE?? OR GLARE?? OR GLARING OR PHANTOM- ?? OR REMANENCE
S8	39	(S1 OR S2) (3N)S3
S9	21	S8(20N) (S4 OR S6 OR S7)
S10	19	S9 NOT AD=20021031:20061030/PR
S11	0	S10 AND IC=G06K?
S12	14	S9 NOT (POLYMER? OR CRYSTAL?)
S13	0	S14(40N)WEIGHT???
S14	4	S12(30N)WEIGHT???
S15	1	S5 AND CONVOLUTION

14/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.

00480284

Apparatuses and methods for processing of data such as colour images
Geräte und Verfahren zur Verarbeitung von Daten, wie zum Beispiel
Farbbildern

Appareils et methodes pour le traitement de donnees, telles que les images
en couleurs

PATENT ASSIGNEE:

SCITEX CORPORATION LTD., (861613), 7 Hamada Street, Herzliya 46103, (IL),
(applicant designated states:
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Spiegel, Ehud, 10 Mordei Hagetaot Street, Rehovot, (IL)
Broudo, Moshe, 38 Kdoshei Kahir Street, Holon, (IL)
Lavie, Reuven, 2 Hayarden Street, Herzlia, (IL)
Bresler, Yoav, 24 Refidim Street, Tel Aviv, (IL)
Pluda, Yavoc, 30 Sagi Street, Alfei-Menashe, (IL)

LEGAL REPRESENTATIVE:

Hillier, Peter (47812), Reginald W. Barker & Co., Chancery House, 53-64,
Chancery Lane, London, WC2A 1QU, (GB)

PATENT (CC, No, Kind, Date): EP 449407 A2 911002 (Basic)
EP 449407 A3 931006
EP 449407 B1 970409

APPLICATION (CC, No, Date): EP 91300905 910204;

PRIORITY (CC, No, Date): IL 93274 900205; IL 93493 900222; IL 96816 901227;
IL 96829 901230; IL 96957 910115; IL 96955 910115

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS (V7): H04N-001/46;
ABSTRACT WORD COUNT: 145

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	3984
CLAIMS B	(English)	EPAB97	1174
CLAIMS B	(German)	EPAB97	1274
CLAIMS B	(French)	EPAB97	1404
SPEC A	(English)	EPABF1	61203
SPEC B	(English)	EPAB97	39504
Total word count - document A			65192
Total word count - document B			43356
Total word count - documents A + B			108548

...SPECIFICATION is 3:1, three convolution operations are performed on the same five columns of CT **pixels**, corresponding to the three output **pixels** "superimposed" upon the central **pixel** of the middle column of CT **pixels**. Each **convolution** comprises the process of adding 5 column convolutions stored in SIPO 190, each **weighted** by an appropriate column coefficient arriving from coefficient table 216. Typically, the three sets of...

...SPECIFICATION is 3:1, three convolution operations are performed on the same five columns of CT **pixels**, corresponding to the three output **pixels** "superimposed" upon the central **pixel** of the middle column of CT **pixels**. Each **convolution** comprises the process of adding 5 column convolutions stored in SIPO 190, each **weighted** by an appropriate column coefficient arriving from coefficient table 216. Typically, the three

sets of...

14/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00436614

Helical scan computed tomography
Spiralabtasterechnertomographie
Tomographie a balayage spirale par calculateur
PATENT ASSIGNEE:

GENERAL ELECTRIC COMPANY, (203903), 1 River Road, Schenectady, NY 12345,
(US), (Proprietor designated states: all)

INVENTOR:

Crawford, Carl Ross, 2557 North Lake Drive, Milwaukee, Wisconsin 53211,
(US)
King, Kevin Franklin, 15651 West Ridge Road, New Berlin, Wisconsin 53151,
(US)

LEGAL REPRESENTATIVE:

Szary, Anne Catherine, Dr. et al (76781), London Patent Operation, GE
International, Inc., Essex House, 12-13 Essex Street, London WC2R 3AA,
(GB)

PATENT (CC, No, Kind, Date): EP 430549 A2 910605 (Basic)
EP 430549 A3 920520
EP 430549 B1 020306

APPLICATION (CC, No, Date): EP 90312638 901121;

PRIORITY (CC, No, Date): US 440530 891122

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS (V7): G06T-011/00

ABSTRACT WORD COUNT: 110

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200210	755
CLAIMS B	(German)	200210	684
CLAIMS B	(French)	200210	886
SPEC B	(English)	200210	4286
Total word count - document A			0
Total word count - document B			6611
Total word count - documents A + B			6611

...SPECIFICATION degree) apart. This method of reconstructing a tomographic image is termed "half scan" reconstruction. The **weighting** and reconstruction of **images** from a half scan data set are discussed in detail in "Optimal Short Scan **Convolution** Reconstruction for Fanbeam CT ", Dennis L. Parker, Medical Physics 9(2) March/April 1982.

The present invention reduces skew...

14/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00436270

Helical scanning computed tomography
Rechnergesteuerte Tomographie mit schraubenformiger Abtastung
Tomographie par calculateur avec balayage helicoidal
PATENT ASSIGNEE:

GENERAL ELECTRIC COMPANY, (203903), 1 River Road, Schenectady, NY 12345,
 (US), (applicant designated states: DE;FR;GB;NL)
 INVENTOR:
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 PATENT (CC, No, Kind, Date): EP 428348 A2 910522 (Basic)
 EP 428348 A3 920701
 EP 428348 B1 970423
 APPLICATION (CC, No, Date): EP 90312285 901109;
 PRIORITY (CC, No, Date): US 435980 891113
 DESIGNATED STATES: DE; FR; GB; NL
 INTERNATIONAL PATENT CLASS (V7): G06T-011/00; A61B-006/03;
 ABSTRACT WORD COUNT: 101

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB97	646
CLAIMS B	(German)	EPAB97	585
CLAIMS B	(French)	EPAB97	794
SPEC B	(English)	EPAB97	4919
Total word count - document A			0
Total word count - document B			6944
Total word count - documents A + B			6944

...SPECIFICATION data ordinarily requires that the half scan data set be weighted with a "half scan **weighting**" function so that the duplicative data does not make a disproportionate contribution to the final image when incorporated with the non-redundant data. The **weighting** and reconstruction of **images** from a half scan data set are discussed in detail in "Optimal Short Scan **Convolution** Reconstruction for Fanbeam CT ", Dennis L. Parker, Medical Physics 9(2) March/April 1982.
 The source of the duplicative...

14/3,K/4 (Item 4 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2006 European Patent Office. All rts. reserv.

00435948

Computerized tomographic image reconstruction method for helical scanning
 Rechnergesteuertes tomographisches Bildrekonstruktionsverfahren für
 Spiralabtasten

Methode de reconstruction d'image tomographique par calculateur pour
 balayage spiral

PATENT ASSIGNEE:

GENERAL ELECTRIC COMPANY, (203903), 1 River Road, Schenectady, NY 12345,
 (US), (Proprietor designated states: all)
 INVENTOR:
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(GB)

PATENT (CC, No, Kind, Date): EP 426464 A2 910508 (Basic)

EP 426464 A3 920429

EP 426464 B1 020306

APPLICATION (CC, No, Date): EP 90311954 901101;

PRIORITY (CC, No, Date): US 430372 891102

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS (V7): G06T-011/00

ABSTRACT WORD COUNT: 142

NOTE:

Figure number on first page: 003

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200210	789
CLAIMS B	(German)	200210	717
CLAIMS B	(French)	200210	861
SPEC B	(English)	200210	4637
Total word count - document A			0
Total word count - document B			7004
Total word count - documents A + B			7004

...SPECIFICATION redundant data requires that the half scan data set be weighted with a "half scan **weighting**" function so that the redundant data does not make a disproportionate contribution to the final image when incorporated with the non-redundant data. The **weighting** and reconstruction of **images** from a half scan data set are discussed in detail in "Optimal Short Scan **Convolution** Reconstruction for Fanbeam CT ", Dennis L. Parker, Medical Physics 9(2) March/April 1982.
The source of the redundant..

15/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2006 WIPO/Thomson. All rts. reserv.

00903315 **Image available**
METHOD AND SYSTEM FOR TAG DETECTION AND TRACKING IN MRI TAGGED IMAGES
PROCEDE ET SYSTEME PERMETTANT LA DETECTION ET LE SUIVI DE MARQUEURS DANS
DES IMAGES A MARQUEURS IRM

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA
Eindhoven, NL, NL (Residence), NL (Nationality)

Inventor(s):

ALLOUCHE Cyril , Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

CHARPAIL Francois (agent), Internationaal Octrooibureau B.V., Prof.
Holstlaan 6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237416 A2-A3 20020510 (WO 0237416)

Application: WO 2001EP12405 20011024 (PCT/WO EP0112405)

Priority Application: EP 2000403028 20001031

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 4413

Inventor(s):

ALLOUCHE Cyril ...

Fulltext Availability:

Detailed Description

Detailed Description

... is .

$E(x) = \sum R_i X[x, x, +,] * e^{-(x / a)^2}$

That is to say, the **convolution** of the step-function $(R_i)_i$ by the
centered gaussian of standard 1 5 deviation...

File 9:Business & Industry(R) Jul/1994-2006/Oct 27
 (c) 2006 The Gale Group
 File 15:ABI/Inform(R) 1971-2006/Oct 30
 (c) 2006 ProQuest Info&Learning
 File 16:Gale Group PROMT(R) 1990-2006/Oct 27
 (c) 2006 The Gale Group
 File 20:Dialog Global Reporter 1997-2006/Oct 30
 (c) 2006 Dialog
 File 47:Gale Group Magazine DB(TM) 1959-2006/Oct 27
 (c) 2006 The Gale group
 File 75:TGG Management Contents(R) 86-2006/Oct W4
 (c) 2006 The Gale Group
 File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Oct 27
 (c) 2006 The Gale Group
 File 88:Gale Group Business A.R.T.S. 1976-2006/Oct 27
 (c) 2006 The Gale Group
 File 98:General Sci Abs 1984-2006/Oct
 (c) 2006 The HW Wilson Co.
 File 112:UBM Industry News 1998-2004/Jan 27
 (c) 2004 United Business Media
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2006/Oct 27
 (c) 2006 The Gale Group
 File 264:DIALOG Defense Newsletters 1989-2006/Oct 27
 (c) 2006 Dialog
 File 484:Periodical Abs Plustext 1986-2006/Oct W4
 (c) 2006 ProQuest
 File 553:Wilson Bus. Abs. 1982-2006/Oct
 (c) 2006 The HW Wilson Co
 File 570:Gale Group MARS(R) 1984-2006/Oct 27
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 File 620:EIU:Viewswire 2006/Oct 29
 (c) 2006 Economist Intelligence Unit
 File 621:Gale Group New Prod.Annou.(R) 1985-2006/Oct 27
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 File 623:Business Week 1985-2006/Oct 27
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 File 624:McGraw-Hill Publications 1985-2006/Oct 30
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 (c) 2006 IDG Communications
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 (c) 1999 Business Wire
 File 813:PR Newswire 1987-1999/Apr 30
 (c) 1999 PR Newswire Association Inc
 File 587:Jane's Defense&Aerospace 2006/Oct W3
 (c) 2006 Jane's Information Group

Set	Items	Description
S1	252724	X() (RAY?? OR RADIATION OR RADIOGRAPHY)

S2	435257	CT OR COMPUTED() (TOMOGRAPHY OR RADIOGRAPHY)
S3	4154	CONVOLUTION
S4	15343041	IMAG? OR FLUOROSCOPIC()IMAG? OR PIXEL? OR PEL OR POINT??
S5	0	AU=(ALLOUCHE, C? OR ALLOUCHE C?)
S6	729378	FILTER??? OR FOURIER(3N)TRANSFORM??
S7	1210914	NOISE?? OR INTERFERENCE?? OR GLARE?? OR GLARING OR PHANTOM- ?? OR REMANENCE??
S8	8567	S1(3N)S2
S9	0	S8(3N)S3
S10	0	S8(20N)S3
S11	0	S8(40N)S3
S12	5	S8 AND S3
S13	5	RD (unique items)
S14	2	S13 NOT PY>2002
S15	8	(S4(10N)(S6 OR S7))(3N)S8
S16	0	S15 AND S3
S17	5	S15 NOT PY>2002
S18	5	RD (unique items)

14/3,K/1 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
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05230235 SUPPLIER NUMBER: 57153144
**Low-energy X - ray studies.(CT Reconstruction by Using the MLS-ART
Technique and the KCD Imaging System, part 1)**
Guan, Huaiqun; Gaber, M. Waleed; DiBianca, Frank A.; Zhu, Yunping
IEEE Transactions on Medical Imaging, 18, 4, 355(4)
April, 1999
ISSN: 0278-0062 LANGUAGE: English RECORD TYPE: Abstract

**Low-energy X - ray studies.(CT Reconstruction by Using the MLS-ART
Technique and the KCD Imaging System, part 1)**

...AUTHOR ABSTRACT: kinestatic charge detector (KCD) combined with the
multilevel scheme algebraic reconstruction technique (MLS-ART) for **X - ray**
computer tomography (**CT**) reconstruction. The KCD offers excellent
detective quantum efficiency and contrast resolution. These characteristics
are especially...

...used. In addition, the MLS-ART algorithm offers better contrast
resolution than does the conventional **convolution** backprojection (CBP)
technique when the number of projections is limited. Here we present images
of...

14/3,K/2 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2006 The Gale Group. All rts. reserv.

04153934 Supplier Number: 132318717 (USE FORMAT 7 FOR FULLTEXT)
**Compute Intensive Applications Get a New Processing Engine with Motorola's
First DataBoard.**
PR Newswire, pNA
Oct 30, 2002
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 701

... portable libraries have been tuned to enable the HXEB100 to
efficiently execute FFTs, filtering and **convolution** , and vector and
matrix computations, which are the basis of imaging and sonar/radar
applications. In a recent medical imaging **convolution** application, VSIPL
combined with AltiVec will provide up to a 5x performance improvement over
existing...

...is compatible with both 1U and 4U platforms so it will easily fit in
most **CT** , **X - Ray** , radar, and embedded applications."
Standard Features on the HXEB100 include:

-- Dual or single MPC7455 microprocessor...

18/3,K/1 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
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05170100 SUPPLIER NUMBER: 55411953
Implementation of a combined X - ray CT -scintillation camera imaging system for localizing and measuring radionuclide uptake: experiments in phantoms and patients. (computerized tomography)
Tang, HR; Brown, JK; Da Silva, AJ; Matthay, KK; Price, DC; Huberty, JP; Hawkins, RA; Hasegawa, BH
IEEE Transactions on Nuclear Science, 46, 3, 551(7)
June, 1999
ISSN: 0018-9499 LANGUAGE: English RECORD TYPE: Abstract

Implementation of a combined X - ray CT -scintillation camera imaging system for localizing and measuring radionuclide uptake: experiments in phantoms and patients. (computerized tomography)

...AUTHOR ABSTRACT: 0 (+ or -) 0.4 mm. Preliminary patient scans suggest that the registration techniques developed for **phantom** studies can be used. Conversion of **X - ray CT image** data to attenuation maps was accomplished by the scaling of calibration data and includes extensions...

18/3,K/2 (Item 2 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2006 The Gale Group. All rts. reserv.

04382424 SUPPLIER NUMBER: 19799027
Use of x-ray CT-defined regions of interest for the determination of SPECT recovery coefficients. (single photon emission computer tomography)
Tang, H.R.; Brown, J.K.; Hasegawa, B.H.
IEEE Transactions on Nuclear Science, v44, n4, p1594(6)
August, 1997
ISSN: 0018-9499 LANGUAGE: English RECORD TYPE: Abstract

...AUTHOR ABSTRACT: which determines activity concentrations for SPECT using regions of interest (ROI's) obtained from coregistered **X - ray CT images**. In this study, experimental **phantoms** containing cylindrical and spherical objects were **imaged** on a combined **X - ray CT /SPECT** system and reconstructed data volumes were registered using the known geometry of the system...

18/3,K/3 (Item 3 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
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04011020 SUPPLIER NUMBER: 18571630
Myocardial perfusion imaging with a correlated X-ray CT and SPECT system: an animal study. (Selected Papers from the 1995 Nuclear Science Symposium & Medical Imaging Conference (NSS/MIC))
Kalki, Kathrin; Brown, J. Keenan; Blankespoor, Stephen C.; Hasegawa, Bruce H.; Dae, Michael W.; Chin, Michael; Stillson, Carol A.
IEEE Transactions on Nuclear Science, v43, n3, p2000(8)
June, 1996
ISSN: 0018-9499 LANGUAGE: English RECORD TYPE: Abstract

...AUTHOR ABSTRACT: from the X-ray CT. Attenuation maps with lower spatial resolution and higher signal to **noise** ratio were also derived from the **X**

- ray CT image . The pixel values and intensity distribution in reconstructed myocardial SPECT image was not sensitive to...

18/3,K/4 (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
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02376652

Silicon General - Marketing Procedures
Annual Report 1989 p. 0

...chip silicon or gallium arsenide integrated circuit.
Applications include magnetic resonance imaging (MRI), computerized tomography (CT scanners), digitally enhanced X - ray imaging , ultrasonic imaging , gas and liquid chromatography, Fourier transform spectroscopy, high speed digital oscilloscopes, and advanced audio such as that used to make digital...

18/3,K/5 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
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00634773 CMP ACCESSION NUMBER: EET19890911S2894

SBL finds interconnect faults

John Adams Chief Scientist Four Pi Systems Corp. San Diego
ELECTRONIC ENGINEERING TIMES, 1989, n 555, T8
PUBLICATION DATE: 890911
JOURNAL CODE: EET LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: SR
WORD COUNT: 1294

... doctors with X-ray cross-section images of patients, revolutionizing the medical diagnostic world. The CT X - ray slice image allows doctors to diagnose medical problems without the noise (the intervening material above or below the desired image slice) associated with conventional- transmission X-ray images.

CT gives the patient a lower X...